COMLEX-USA FOR RESIDENCY PROGRAM DIRECTORS
Evidence–based assessment designed specifically for osteopathic medical students and residents that measures competencies required for the provision of safe and effective osteopathic medical care to patients.

PATHWAY TO LICENSURE
COMLEX-USA, the Comprehensive Osteopathic Medical Licensing Examination of the United States, is the exam series used by all medical licensing authorities to make licensing decisions for osteopathic physicians. COMLEX-USA is accepted in all 50 United States and recognized by a number of international jurisdictions. COMPLEX-USA is designed to assess osteopathic medical knowledge, fundamental clinical skills, and other foundational competencies considered essential for the practice of osteopathic medicine. The primary and intended use of COMLEX-USA is for licensure.

RECOGNIZED EVIDENCE FOR VALIDITY
A rigorous scientific process is used to produce exams of the highest quality with evidence-based validity and reliability. Following a comprehensive review of COMLEX-USA and USMLE, the FSMB (Federation of State Medical Boards) endorsed both exams as valid and reliable for their intended respective purposes, and concluded that support for the validity of COMLEX-USA is exemplary. A recently published collaborative study with the Federation of State Medical Boards (Roberts et al) on the predictive validity of COMLEX-USA demonstrates a strong correlation between successful completion of COMLEX-USA and a lower likelihood of state licensing board disciplinary action.

ELIGIBILITY AND ATTESTATION
Eligibility criteria for COMLEX-USA exams require attestation by a dean or residency program director to confirm that the candidate is in good academic and professional standing and is approved to take the exam. Good standing denotes that the osteopathic medical student or resident meets the academic and professional requirements of the college of osteopathic medicine or residency program and is eligible to continue in the program.

It is recommended but not required that COMLEX-USA Level 3 be taken after a minimum of six months in residency. The attestation process for COMLEX-USA Level 3 helps to fulfill the NBOME mission to protect the public, and adds value and entrustability to state licensing boards and patients. Additionally, attestation provides COMLEX-USA score reports to residency program directors and faculty.

COMPETENCY AND EVIDENCE-BASED DESIGN
In 2019, COMLEX-USA completed a transition to a contemporary, two decision-point, competency-based exam blueprint and evidence-based design informed by extensive research on osteopathic physician practice, expert consensus and stakeholder surveys. The enhanced COMLEX-USA blueprint assesses measurable outcomes of seven Fundamental Osteopathic Medical Competency Domains and focuses on high-frequency, high-impact health issues and clinical presentations that affect patients.

EQUALITY FOR COMLEX-USA AND USMLE IN ACGME PROGRAMS
The American Medical Association, the Accreditation Council for Graduate Medical Education, and the Federation of State Medical Boards recognize equivalent uses for COMLEX-USA and USMLE.
RESIDENT SELECTION AND SECONDARY USES
COMLEX-USA and USMLE scores are used increasingly to screen and evaluate DO residency applicants. In addition to use by residency program directors, other secondary uses of COMLEX-USA scores include student and resident promotion and assessment.

All osteopathic medical students must pass COMLEX-USA Level 1, Level 2-CE and Level 2-PE to graduate from a college of osteopathic medicine with the DO degree.¹

NBOME recommends residency and fellowship program directors develop a strong understanding of what COMLEX-USA exams measure, how standards are set, what the scores mean, and how COMLEX-USA scores correlate to performance in residency.

EQUIVALENT USES OF LICENSURE EXAMS
COMLEX-USA is recognized by the ACGME for acceptance into graduate medical education (GME). The ACGME Single Accreditation System for GME aligns accreditation standards for all residency programs in the U.S., providing graduates of DO- and MD-granting medical schools the ability to complete residency and fellowship training in all programs. A single accreditation system for GME is based on mutual recognition and understanding of the important and unique qualifications and philosophies of both DO and MD graduates.

The ACGME publicly communicates its policy that COMLEX-USA and USMLE are both acceptable for ACGME residency programs and has clarified that DO candidates are not required to pass USMLE exams in order to be eligible to apply to ACGME-accredited residency programs. An individual who has completed an ACGME-accredited residency program or an AOA-approved residency program in any given specialty is eligible for appointment to any ACGME-accredited fellowship program that allows prerequisite education and training in that specialty, regardless of which licensing exam(s) the individual has pursued.¹

Acceptance of COMLEX-USA by all ACGME programs may reduce stress and support wellness in residency applicants, and diminish barriers for DO students applying to programs and improve holistic resident screening processes.

OVER 82% OF ACGME-ACCREDITED RESIDENCY PROGRAM DIRECTORS USE COMLEX-USA AS PART OF THE APPLICATION PROCESS FOR DO APPLICANTS

Students and their abilities as a physician are not defined solely by a number. Program directors need to get comfortable with DO applicants and using COMLEX-USA as just one tool to review which applicants have the skills necessary to thrive in a GME program — just like they learn about other things in their program, they need to learn to adapt to this change.”

— Kenneth B. Simons, MD, Senior Associate Dean for GME and Accreditation, Medical College of Wisconsin

INTERPRETING COMLEX-USA SCORES
COMLEX-USA exams use a criterion-referenced standard setting methodology. The minimum passing score for COMLEX-USA Level 1 or Level 2-CE is 400, with a mean score between 500 and 550. For Level 3, a score of 350 is passing with a mean score between 500 and 550.

Passing Levels 1 and 2 means a candidate has demonstrated competence to enter into supervised clinical practice settings, enter graduate medical education, and prepare for lifelong learning. Passing Level 3 means the candidate has demonstrated competence in foundational competency domains required for generalist physicians to deliver safe and effective osteopathic medical care of patients as required for entry into the unsupervised practice of osteopathic medicine and to continue lifelong learning and practice-based learning and improvement.

PERCENTILE RANK SCORE CONVERSION
A percentile score conversion tool is accessible via the NBOME website as well as the ERAS® Program Director Workstation. This tool converts an applicant's 3-digit COMLEX-USA score to a percentile rank to help programs compare an applicant's relative performance to other applicants within a testing cycle, and correctly interpret assessment scores when filtering applications.

<table>
<thead>
<tr>
<th>COMLEX-USA Level 1, May 2018-April 2019 Cohort</th>
<th>3-DIGIT SCORE/PERCENTILE RANK</th>
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<tbody>
<tr>
<td>750</td>
<td>700</td>
</tr>
<tr>
<td>99</td>
<td>97</td>
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CONVERSION VARIES BY TESTING CYCLE

NBOME cautions residency program directors to avoid the sole use of any examination score, or the overuse or sole use of any examination program, in screening or hiring residents.
RESEARCH AND HOLISTIC ADMISSION REVIEW
Holistic admission review processes in medical education consider the “whole” applicant to avoid disproportionate focus on a single factor in order to achieve diversity in a physician population that is prepared to address varied needs across health care populations. As part of its research program, NBOME conducts studies designed to help residency program directors understand COMLEX-USA exams and the validity support for using these scores in holistic residency application decisions. A recent study demonstrates a strong association between COMLEX-USA Level 1 and USMLE Step 1 performance of osteopathic medical students who took both exams. With growing support for equivalent uses of COMLEX-USA and USMLE for residency applications, NBOME provides program directors with insight into the uses of COMLEX-USA and how COMLEX-USA scores can be an asset in holistic resident screening and selection processes.

SCORE CONCORDANCE STUDIES
• Lee AS, Chang L, Feng E, Helf S. Reliability and validity of conversion formulas between Comprehensive Osteopathic Medical Licensing Examination of the United States Level 1 and United States Medical Licensing Examination Step 1. Journal of Graduate Medical Education. 2014;6(2):280-283.
• Schenarts PJ, Termuhlen PM, Pasley J, Rose JS, Friedell ML. A primer on how to select osteopathic applicants to an allopathic general surgery residency. Journal of Surgical Education. 2011;68(3):239-245.
• Chick DA, Friedman HP, Young VB, Solomon D. Relationship between COMLEX and USMLE scores among osteopathic medical students who take both examinations. Teach Learn Medicine. 2010;22(1):3-7.

PREDICTIVE VALIDITY PERFORMANCE IN IN-TRAINING AND CERTIFICATION EXAMS
• Langenau EE, Pugliano G, Roberts W. Relationship between high-stakes clinical skills exam scores and program director global competency ratings of first-year pediatric residents. Medical Education. 2011;16:7362.

FOR MORE INFORMATION ABOUT IMPORTANT RESEARCH ON COMLEX-USA VALIDITY AND RELIABILITY, VISIT THE NBOME WEBSITE.

REFERENCES
2. Federation of State Medical Boards of the United States. U.S. Medical Regulatory Trends and Actions.

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